

CRACKLIN' STATIC



Serving the Amateur Radio Community since April 16, 1968

<http://www.snars.org>

RENO, NEVADA

SUMMER 2022

SUMMER SPECIAL EDITION, FIELD DAY 2022 and More

This Summer Special edition of CRACKLIN' STATIC contains no President's Voice, no masthead, no minutes or technical articles, calendars, etc., just the story and photos of SNARS Field Day at Washoe Lake, individual SNARS members' Field Day efforts for 2022, (the ARRL now allows D class stations to work everyone), SNARS POTA at Galena Creek, some SNARS members' radio exploits at other events, and the people who made it happen. No official stuff, just fun! Read on, and enjoy! And, if you didn't send me anything on YOUR Field Day or other summer event but would like to have your efforts published, send them to me, and I'll include them in subsequent issues of the regular Cracklin Static. On many photos I've included the photographer's call sign and/or captions where appropriate. Photos, captions and comments were submitted by Barry K6ST, Jon KF7KTC, Don W7SSB, Howie WB2AWQ, Ken KB2SFS, Dave AG7TX, Don W6DSG, Derek W7LDZ, and Woody K1LB. All contributions gratefully accepted!73, Howie WB2AWQ

SNARS FIELD DAY 2022, WASHOE LAKE STATE PARK

A 7A Field Day setup takes a lot of people, coordination, equipment of all sorts, generators, antennas, food, safety equipment and so much more to make it all happen. Told mainly in the pictures, captions and comments, here's how SNARS managed to pull off Field Day 2022! Held at the main pavilion but scattered around that are the components of SNARS Field Day. Enjoy!



SNARS Strategy Meeting Before FD Start



Tony W7XM and Cliff KJ7TDD Greet Visitors



W7SSB

John N7ROJ Operating 6M SSB



W7SSB

Dave KF7EGU Operating 40M Phone



W7SSB

Peter KE7VSR Operating 40 Phone, Kirk KB7KOD background



KF7KTC

Jim W6US Operating Digital FT8/FT4



KF7KTC

Zack (L) KM4APP doing SSB and Derek W7DLZ assisting.
Derek also Operated CW



W7SSB

Two Sleeping Stations Off the Pavillion



K6ST

KI6WJ Satellite Antenna



W7SSB

N7ROJ 6M Moxon, Chameleon loop



K6ST

KI6WJ Satellite Station, Icom IC-9700, K6ST operating, Jim KI6WJ assisting



W7SSB

W7SSB Experimental magloop attached to an MFJ935 loop tuner



K6ST

SNARS Prez N7JDM John, FD SAFETY OFFICER.



K6ST

Dan KM6CQ checking out the 6 Meter CW



K6ST

Wes KG7QXE solar powered station



K6ST

Nick W7NIK manually logging



K6ST

Nick W7NIK lights the BBQ for Saturday dinner



K6ST

KG7QXE Wes talking with Mike WU7C & Sharon KG7DAO

W7TA 7A NV Field Day 2022 Claimed Score

Contest: FD

Band	Mode	QSOs	Pts	Pt/Q
3.5	LSB	84	84	1.0
7	CW	6	12	2.0
7	FT8	167	334	2.0
7	LSB	142	142	1.0
14	CW	22	44	2.0
14	FT4	13	26	2.0
14	FT8	23	46	2.0
14	USB	11	11	1.0
21	CW	1	2	2.0
50	USB	4	4	1.0
420	FM	1	1	1.0
GOTA	USB	1	1	1.0
Total	All	475	708 (X2 for 100W power)	

Score: 1,414

Bonus points claimed: Check each block as appropriate and include required proof of points with your submission. All bonus points will be verified at ARRL HQ and added to your score.

700 100% Emergency power (Max. 20 transmitters)
 100 Set-up in Public Place
 100 Information Booth
 100 W1AW Field Day Message
 100 Satellite QSO completed
 100 Natural power QSOs completed
 50 Submitted using the web app field-day.arrl.org
 100 Safety Officer Bonus
 100 Social Media Bonus
 Total Bonus Points Claimed: 1450

Total Claimed points 2864

Not Pictured is KJ6EAC Brian who gets honorable mention as he was not able to be at the Sat/Sun FD event but helped out Thursday picking up food and bringing it out Friday; a big THANKS Brian!!!

And thanks to the FD team of many SNARS members and guests for all sorts of different roles, from cooks to kitchen duties, from getting the food to preparing the food, from generators with fuel to many long extension cords, from laptops to radio, from antennas to coax, from operators to Elmers ... and everything in between that got filled in to have this year's SNARS 2022 Field Day a very fun and enjoyable outdoors gathering ... W7TA 7A Nevada
 Submitted by **Barry K6ST**

SNARS MEMBERS' FIELD DAY EFFORTS AND SUMMER EVENTS

WB2AWQ and KB2SFS



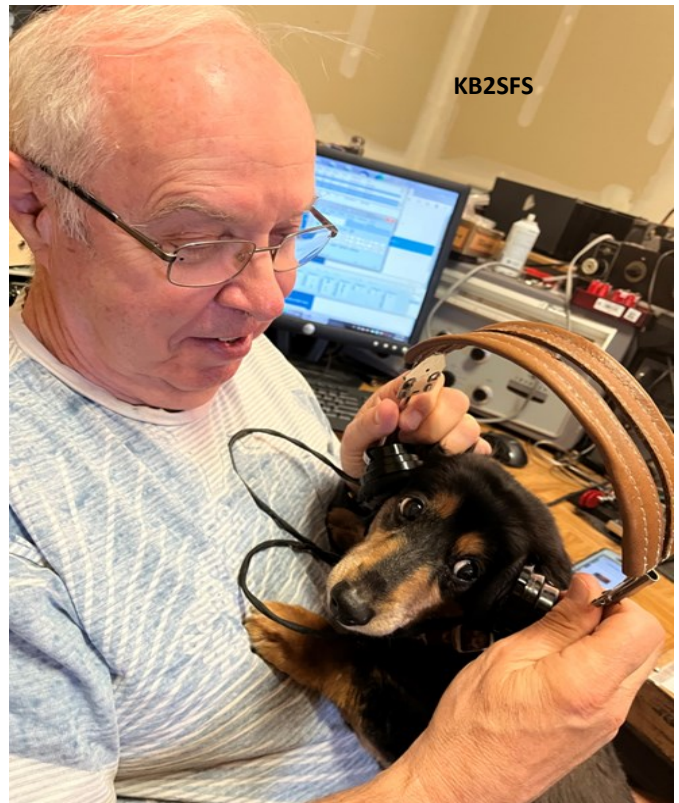
Ken KB2SFS (front) and Howie WB2AWQ with K9WOOF

Field day 2022 found my son Ken KB2SFS and me, WB2AWQ doing a 2D, CW only, for the third year in a row from our house. I needed to be not far from my XYL due to medical conditions, and Ken needed to be close to home for his preggo wife, not to mention that we've been doing Field Day together for nearly 30 years.

Band conditions were decent on Saturday, only fair on Sunday. We worked 80, 40, and 20 meters. Ken, who was using a setup during the day on Saturday which had a single feedline and vertical antennas for both 20 and 15, monitored 15 occasionally, but signals were in and out, not reliable enough to make a meaningful number of QSOs. This could also be due to my low antennas, which don't work as well on the upper bands as on the lower ones. We used 20 and 40 in daylight, and we switched over to 80 and 40 at night. We were able to work side by side. Ken was using his 22-year-old Icom IC718 (you don't REALLY need that fancy new best-of-everything rig to work FD) and a ground mounted 20/15M vertical. I used a fence-mounted dipole for 80 and 40M during the day, while Ken used an end-fed half-wave on 40 at night. The end-fed half-wave performs better on 40, but it picks up more solar-panel noise during the day in our area. I ran a Kenwood TS-440SAT (38 years old) on 40, and a Yaesu FT-101EE (46 years

old) on 80. The Yaesu did better with mutual interference on 80 than the Kenwood did. We had minimal mutual interference all around, and we have a "band plan" where the person on the lower band stays about 20Khz above the band edge, giving the person on the higher band a full 40Khz free of strong interference. Maybe next year with the really old stuff!

Ken's wife was pregnant, and due any day as we approached Field Day, so Ken's time was limited to 12 hours. We operated a total of about 28 hours between us and made 422 QSOs. We worked 68 of the 84 US and RAC zones (most of the missing ones were in Canada), plus Hawaii, and several DX stations. 80 meters was limited to stations west of the Mississippi river, but we could hear stations all the way to the east coast. It was a good run, but not our best. Total final claimed score was 1838 including copying the W1AW message Saturday morning first on 20M from W1AW, then from K6KPH on 40. We did better last year with 502 QSOs.

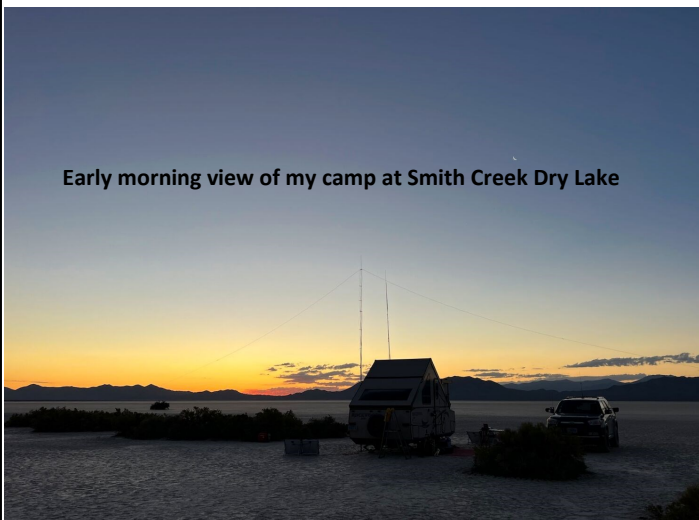


K9WOOF getting ready to "copy" CW

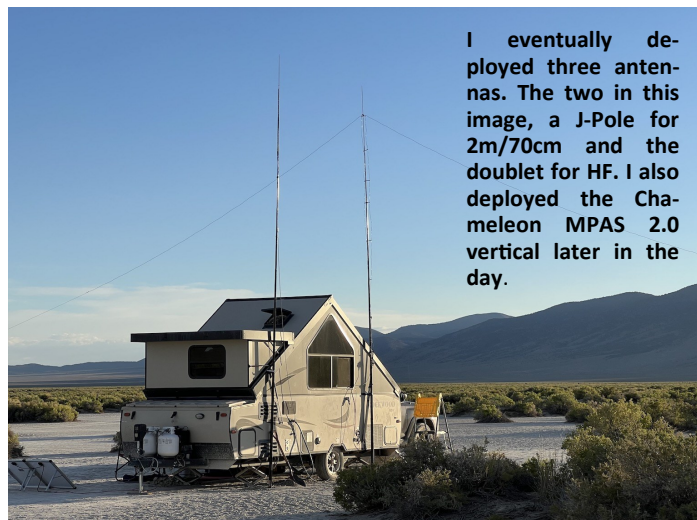
Despite Saturday's warm temps, we kept things reasonably cool in my garage shack, temp max was about 84 degrees. Had Field Day been a day later, it might have been a different story. Late on Sunday, the garage temp went up to 94 degrees. Ken's wife gave birth three days after FD. Sullivan Thomas, 8 lbs 11 oz. Our seventh grandchild. 73, WB2AWQ

DAVE THOMPSON AG7TX Smith Creek Dry Lake, NV

Dave's Field Day 2022 on his Ruminations website is extremely long, so I decided to NOT include any of the text in his Field Day offering, as I could not edit it without losing much of the essence of it. Instead, I STRONGLY suggest you go to the link to his Ruminations website at the end of his FD/Bumblebee pages, and read it yourself. Dave has long experience, so there's lots to learn, and Dave is one heck of a writer! In any event, Dave went to Smith Creek Dry Lake, 40 or so miles southeast of Austin. About in the middle of Nevada as you can get, and probably as far from any civilization too!



Early morning view of my camp at Smith Creek Dry Lake



I eventually deployed three antennas. The two in this image, a J-Pole for 2m/70cm and the doublet for HF. I also deployed the Chameleon MPAS 2.0 vertical later in the day.



This is my galley. I was working up my second cup of coffee and cooking some bacon. The Girl gets the bacon fat and then I make some eggs. She generally gets a nibble of my bacon and maybe a bite of egg as well.



Not long after Field Day 2022 started, a small shower approached and drove me indoors. I saw it coming, so I had plenty of time to move the equipment. What I didn't know is what happened to others in our expedition.



After the rain drove me indoors, this was my station for Field Day 2022, including the Yaesu FT-897D used for local communications on 2m.



After Field Day 2022 ended, we celebrated the weekend and the fellowship. The remainder of our group had already departed. We stayed over.

AG7TX continued.....



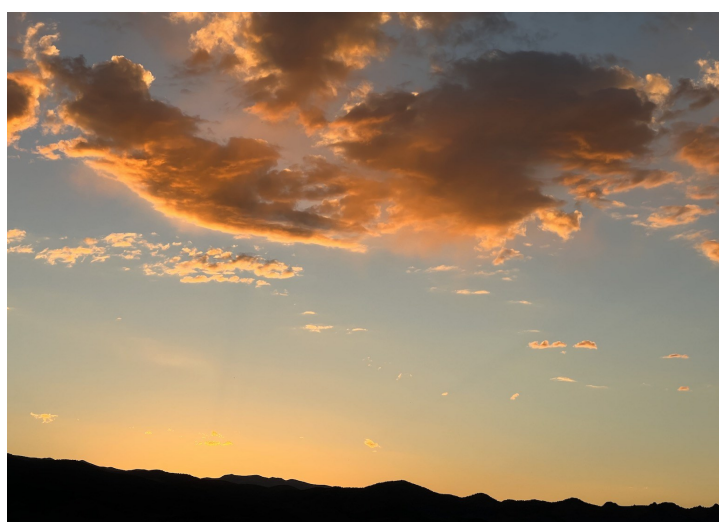
Here is my rig and a morning crescent Moon.



Middlegate Station, a favorite place for a respite in the "middle of nowhere."



It was break time. I wandered over to *Greg's Place*, brought my supper, and then we relaxed with a campfire before The Girl and I headed home.



Sunset, Field Day 2022, Smith's Creek Dry Lake, Austin, Nevada.

AG7TX Flight of the Bumblebees Contest 7-31-22, Washoe Lake, NV

This year, 2022, was my first Flight of the Bumblebees contest. This is a QRP (low power, usually 5w for CW mode) and has been going on for a number of years.

I planned to work the contest for the last few weeks. I decided to operate in the field (of course) from Washoe Lake State Park, which is also a Parks-on-the-Air park (K-2640). I often activate the park as it is only a short drive from my home and The Girl and I love to walk there. It is a win-win for both of us.

I picked up my friend, Diana (KJ7GVY) about 0900h and we made the short drive up to Washoe Lake. I prefer to operate on the west side because the take-off angles are better and there are a lot fewer people. We picked a spot and started setting up the equipment.

I elected to hang a tarp over the back of the 4Runner to provide extra shade as it has been very hot in the afternoons here. Although there

was overcast, the wind was down and the humidity was up. By the time we got the station set up, I was quite soaked in sweat. This is unusual for me.

The station was my Elecraft KX3 at five watts to an end-fed half wave antenna. The antenna is built on a Balun Designs 49:1 matching transformer, but I cut the wire and counterpoise for the antenna and tuned them.

Aside: I have in mind another design for an EFHW. After reading a paper on these antennas, it seems that a 36:1 matching transformer with a 200pf capacitor about a third of the way from the feed point will make a 40m EFHW work better on the upper bands. I am going to try one. I just about have everything I need to build the transformer and radiating elements.

I think I started operating about 1030h local. I heard nothing on 40m. I was hoping for some California and close-in Oregon stations, but nothing heard. The 20m band had quite a few operators around 14.060MHz. I chased a couple of them and then looked over at my friend.

AG7TX Continued.....

"I'm going to run a frequency. I think I'll do better if I just pick and place and go."

So I found a place about 14.062MHz and started calling CQ CQ BB de AG7TX AG7TX/BB AR. After a few calls I started picking up some callers and worked them as I could. I am still learning CW and CW operating practice. This was the first time I ran a frequency in a CW contest.

But all the practice running a frequency for POTA and SOTA activations paid off. I picked off call signs or fragments and worked the callers. It is such good brain work and I had a blast.

Each time the well ran dry, I would check another band. I worked a friend on 40m, but I'm confident he was running more than five watts. I also worked him on 20m, but he never got below 20w. So he does not count for the contest (but will get a POTA credit).

The 20m band was the band to work here in western Nevada. I made a total of 35 contacts, dropping those that I did not get a power from or that I new were operating more than five watts. This included 19 Bumblebees.

After the contest ended, we walked The Girl a bit. Then we headed back to Carson City and made a stop at the Sonic. The chili dog and shake just topped off the day. The Girl got a few tater tots for her contributions as well.

I had a blast. It was a good day.



My station and operation position for the 2022 Flight of the Bumblebees contest. Yep, that's a dog's tail in the bottom of the frame.

See <http://randomruminations.net/> for more of Dave's adventures!



Radio in the Park

This past month on July 16th, we had 8 hams operate and a few ham guests come out to Gelena Creek Park for the **SNARS POTA** Gathering. It was totally fun and lots of learning happened also at the POTA activation in the Humboldt-Toiyabe National Forest (POTA K-4391 Park).

If you want to learn more about Parks on the Air, come to the Ham Radio Night via zoom at 7PM PDT on Monday August 15th, 2022.

73, K6ST Barry



K7TDM Tyler running FT8 on 30m and 20m for POTA and K6ST Barry learning

Pleasure (Parks) On The Air – A Review

By Gary Carman WJ9T

It all started last July on a crisp Saturday morning that promised to be a scorcher of a hot day in the Truckee Meadows. As predicted, the sun trounced the Reno area with temperatures exceeding the century mark. As it turned out, the location of the first SNARS, Parks On The Air (POTA) adventure couldn't have been more comfortable for this event. About ten adventurous amateurs of all ages and backgrounds arrived at the expansive "Bearmat" picnic area to set up their stations and compare notes with the more experienced POTA players. As it turned out, the Galena Creek Regional Park was an oasis in the middle of the Reno area furnace. Between the mature pine forest and an altitude of over 6,200 feet, the park provided a wonderful respite from the Nevada summer.

Woody K1LB, our resident POTA Manager had made a great suggestion to use the Galena Creek Park, as it also qualifies as an official POTA location (K-4391) due to its proximity with the Humboldt-Toiyabe National Forest. Our combined thanks also go to Barry K6ST for his efforts in organizing the SNARS event. I might add that Woody was extremely helpful in assisting the operators on a number of procedures to report their contact list to the POTA organization which is a little daunting when you first attempt it. Barry was also instrumental in keeping all of the operators on different frequencies and modes to avoid a cataclysmic local pile up.

Despite the fact that we were all operating on separate bands and using many different modes, there was still a fairly strong RF field that covered the entire picnic area, which directs this conversation to cover some of the operational issues and opportunities.

As one would expect, we had operators using everything from QRP radios to full power (100 Watt) HF portables on SSB, CW, and Digital modes. Despite our attempts to stay on different frequencies and modes, the RF fields generated were so strong, that it made it difficult to complete some of the more distant contacts. Barry has suggested some possible solutions to this issue for future POTA outings. We need to develop a more precise plan to physically separate or stagger stations transmit times to help alleviate this interference. If you have any suggestions on how to best achieve this goal, please feel free to attend the next Ham Radio Night on Zoom. Barry has dedicated a virtual room for POTA. Any and all suggestions will be appreciated.

Despite this one issue, all of the operators managed to get their respective signals out on the airwaves and have a great time. The diversity of equipment was staggering and ranged from diminutive Elecraft units up to Icom 7300's, with an amazing array of end fed wires to vertical antennas from numerous manufacturers.

As this was my first official POTA activation, I can share with you some of the mistakes I made in setting up my equipment as well as what did work successfully. As is usually the case, there is no one answer on how to construct a perfect mobile station. But the real glue that holds together any system is; Practice, Practice, and Practice (yes, the three "P's"). Not only will these practice sessions prepare you for successful POTA activation's, but will also assure that your station, and you, will be ready to handle any emergency communications with your mobile station. When I first designed my Jeep based portable station, I intended to create a "drive, park, talk" system with super fast deployment. I wanted to be able to drive to the POTA location and be ready to make contacts within five minutes. As I set up for my first POTA on that Saturday morning, it became quite evident that the five minute target was a distant goal. One major area stood out as an obvious stumbling block.

The first was a clear message that I didn't follow the three "P's" as listed above. As the mobile station was pieced together, the connections between all of the components became a collection of odd connectors and cables, resulting in a rats nest that was both confusing and unreliable. This alone cost me nearly an hour before I was ready to make my FT-8 contacts due to a faulty DIN power plug that was a mere

2mm short. It was technically the right connector. It just didn't work half the time and it nearly cost me an activation. Since that experience, I have converted every power connector to Anderson Power Poles and now power everything from a standard power pole power strip. No more converters, splices, or intermediate connectors. Yes, a simple fix, but one that could shut down your station if not adhered to.

The final area of concern is, of course, the selection of a good antenna for your specific application. In keeping with my desire for a quick deployment, I decided that a vertical antenna mounted on the top rail of the Jeep was going to be my best option. The antenna system has now gone through three iterations and the jury is still out as to which one will win the grand prize. Yes, more practice is required. The first antenna consisted of the Chameleon MPAS 2.0 whip and extension. This antenna worked just fine for activating the first POTA so I can't say anything negative about its performance. It does require the use of a tuner which isn't the end of the world, but is one more item and a couple more cables to fuss with in the field.

The second system is a set of MFJ Ham Sticks that offer very fast setup and do not require a tuner as they are resonant for most, or all, of the stated band. The only down side is that you need a bundle of them if you want to play multiple bands and it does take a minute to change over your stick with each band change. Still, a good option and very cost effective!

Lastly, the Jeep now sports a Diamond SD-330 screwdriver antenna with a memory driver. Again, it is a true resonant antenna once you dial in the coil. It does add some complexity to the setup as the memory driver needs power, but you can switch frequency and bands very easily. Again, time and practice will determine which system will offer the best results.

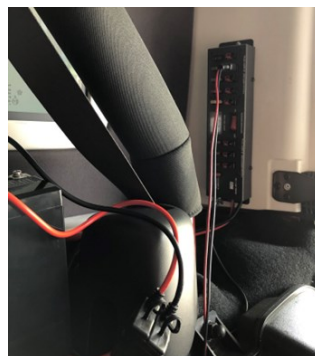
So, grab yourself an 18Ah LiFePO battery, and the rest of your gear, and have a blast in the great outdoors! You will be pleasantly shocked by the lack of electrical noise emanating from your radio and how you can actually hear those distant, weak stations. I would say the SNARS POTA event was a smashing success and I, for one, can hardly wait to participate in the following events. Great people, a beautiful location,

and a lot of POTA fun. POTA truly is a Pleasure On The



WJ9T Gary's operating station at the back of the jeep with an Icom 705 and laptop running WSJT on

Air!



WJ9T Gary's power feed system

More great pix of Gary's setup, and of other hams who participated on the following pages!

POTA Continued.....



WJ9T Gary's great
Diamond SD-330
Screwdriver antenna

Don W6DSG

Hi Barry, hope you are enjoying your Rim Trail event. I wanted to say thank you for organizing the SNARS POTA event today. I had a GREAT time getting together with you and meeting the other club members/operators and seeing their equipment in use. I learned a lot about SOTA/POTA as well, from some passionate SOTA/POTA Elmers. And the activation site at Galena Creek Park couldn't have been better! Watching the first time POTA activators get their 10 QSO's for a valid activation was fun! Also, when Tyler's table (in the shade) opened up, I set up my station and worked 20 meters SSB phone for my first ever POTA activation. I was able to validate that I had a decent, functional POTA field kit. I had a great time making 15 QSO's. Gary stuck around and provided support. I'm going to get my paper log uploaded to HAMRS and submit my log to POTA. I would be interested in participating in another similar event some day. 73, Don W6DSG



Yaesu FT-857, all band, all mode, 100 watts. An oldie but a goodie... 16 amp hour lifepo battery, and a Buddipole Power mini 2 to keep track of power. Plan is to add a solar panel for longer activations to keep the battery charged. Antenna is a Chameleon MPAS in a vertical configuration.

Woody K1LB

It was a blast being part of a SNARS group activation at Galena Creek Rec Area on Saturday, June 16, 2022. On this POTA annual summer "Support Your Parks Weekend" we represented Northern Nevada in grand style by setting up and operating multiple portable amateur radio HF stations and making lots of QSOs on SSB, Digital and CW modes. For hams around the nation, making a contact with a NV Ham is like working rare DX!

I have been involved in POTA as both a Hunter and an Activator for several years. I operate a HF radio station out of my 4Runner, with a totally portable, off-the-grid setup based on an IC-7300, LiFePo battery and 65ft end-fed half-wave wire in an inverted-L configuration. When operating at area parks, the distant weak signals come in loud and clear from thousands of miles away, due low QRN away from suburbia.

Thanks SNARS for hosting a terrific regional event!



Derek - W7DLZ

This was my first POTA activation, though I have done 60 SOTA activations. I enjoyed activating the park, getting to know some SNARS folks better and, of course, being outdoors in the park. I was especially pleased to see at least one ham operate who was new to HF operation in addition to POTA. It only took me 40 minutes to activate the park using CW, completing 12 QSOs, so I went off the air. This allowed others to operate more easily, with less interference.

I operated my ICOM IC-7100. My antenna was an EFHW in an inverted-L configuration on a 32' push-up mast. Power came from a 36AH LiFePO4 battery, which had plenty of energy and current to run my rig for hours. I brought an automatic tuner, but did not really need it, since this antenna is reasonably resonant on 40, 20, 17 & 15M.

The event was a clear success and I had a lot of fun. There was some interference between activators. I do think that future events, like this, would be best divided into several smaller groups of around 3 simultaneous operators (people can still take turns), operating at different parks. We did make it work with a larger group, by operating in a cooperative manner. Park-to-park QSOs could be scheduled as well.

Dave AG7TX

Three days, four activities... Saturday was a #POTA workshop for new activators for the #SNARS club. There were three experienced portable operators and five not so much. We coached them on operating practice and equipment.

* We had too many stations too close together. Folks were running 20w to 100w with antennas that would probably fall in a 200ft circle. There was lots of QRM.

* Most of the operators there had some experience setting up a portable station. Some had good portable setups. A couple of others need work on their portable stations. There is a learning curve.

* It was a successful outing. We got people out in the field activating the park. We had a number of different approaches to see and take notes from.

* I think we have several new POTA activators.

It was a good outing. I DID NOT set up a station, given there were already so many there. I set up a lot of portable stations, so I did not think mine would add anything but more noise.



IF YOU OPERATED FIELD DAY, OR ANY SUMMER EVENT

and you didn't send it to me, but you'd like it published in Cracklin' Static, send me photos, and a brief writeup, and I'll include it in a future issue of Cracklin' Static! 73, Howie WB2AWQ WB2AWQ@arrl.net